POSITION TASK BOOK FOR THE POSITION OF

National Qualification System
GEOGRAPHIC INFORMATION SYSTEMS SPECIALIST

GEOGRAPHIC INFORMATION SYSTEMS SPECIALIST

1. Competency: Assume position responsibilities

Description: Successfully assume the role of Geographic Information Systems (GIS) Specialist and initiate position activities at the appropriate time according to the following behaviors.

1a. Behavior: Gather, update, and apply situational information relevant to the assignment

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
1. Gather logistical information: ● Incident base facilities ● Equipment and supplies available (plotter, computers, ink, paper) ● Availability of GIS server and software licenses	E, F, I		

2. Competency: Communicate effectively

Description: Use suitable communication techniques to share relevant information with appropriate personnel on a timely basis to accomplish objectives in a potentially rapidly changing environment.

2a. Behavior: Produce and distribute information per established guidelines and ensure recipient understands information

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
2. Assist in the production of incident products by completing digital analysis: ● Calculate acres and distance as requested	E, F, I		
3. Collate data from initial and ongoing assessment of incident-related damage and needs, conduct impact analyses, and inform planning and resource decisions with assessment results.	E, F, I		
4. Collect data from internal and external stakeholders to develop and update GIS products: ● Incident maps ● Reference maps: political jurisdiction maps and demographics ● Quantitative and qualitative thematic maps ● Interactive map products: Keyhole Markup Language (KML), ArcReader, web mapping software	E, F, I		
5. Develop and update products within established time frames.	E, F, I		
6. Develop key GIS products in at least three of these functional areas: ● Emergency Services ● External Affairs ● Hazard Mitigation ● Individual Assistance ● Logistics ● Long-Term Recovery and Planning ● Planning ● Public Assistance/Infrastructure	E, F, I		
7. Develop, update, and maintain metadata.	E, F, I		
8. Follow and maintain a daily archival process: ● Perform daily backups ● Upload data and GIS products to relevant file transfer protocol (FTP) sites ● Create backup copies of incident spatial data within the incident data structure	E, F, I		
9. Integrate event-specific model output in coordination with authoritative sources: ● Sea, Lake, and Overland Surges from Hurricanes (SLOSH) ● Hazards U.S. (Hazus) ● Atmospheric transportation and dispersion models, such as Interagency Modeling and Atmospheric Advisory Center (IMAAC) ● Hydrometeorological Precipitation Center (HPC) • National Infrastructure Simulation and Analysis Center (NISAC) ● Plume modeling	E, F, I		
10. Meet information requirements to support decisions.	E, F, I		

11. Provide to the Documentation Unit or other appropriate personnel written documentation, digital data, and products developed during the incident, as requested.	E, F, I		
12. Use standard data file structure.	E, F, I		

3. Competency: Ensure completion of assigned actions to meet identified objectives

Description: Identify, analyze, and apply relevant situational information and evaluate actions to complete assignments safely and meet identified objectives. Complete actions within established time frame.

3a. Behavior: Maintain GIS products and hardware software applications

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
13. Operate specialized applications or GIS software for disaster support: ● Adobe products ● ArcGIS Desktop ● ArcGIS Spatial Analyst ● Google Earth ● Microsoft Office Suite ● Information Management Systems	E, F, I		

3b. Behavior: Gather, analyze, and validate information pertinent to the incident or event and make recommendations for setting priorities

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
14. Download data from various GPS units and incorporate the data into the incident GIS.	E, F, I		
15. Identify and obtain data (digital and paper): ● Base ● Incident ● Local ● Metadata	E, F, I		
16. Review maps and data for accuracy and report inaccuracies to supervisor.	E, F, I		
17. Support incident modeling and mapping requests.	E, F, I		

3c. Behavior: Utilize information to produce outputs

TASK	CODE	EVALUATION RECORD #	EVALUATOR INITIALS AND DATE
18. Coordinate with GIS Analyst, Situation Unit Leader, Situational Awareness Unit Leader, or appropriate personnel to prepare incident maps and displays by collecting and interpreting information: ● Photos ● Graphics/images ● Other documents ● Operations and planning personnel	E, F, I		
19. Digitize and georeference data within GIS software: ● Vector ● Raster	E, F, I		
20. Ensure that data is accurate and from authoritative sources.	E, F, I		

21. Import/export GIS data: ● Various coordinate systems, Geographic to United States National Grid (USNG) ● Data ● Projections	E, F, I		
22. Perform basic geoprocessing and analytical tasks ● D-3 ● SQL queries ● Comparisons, joins, parses, and relates ● Buffer, intersect, and clip	E, F, I		
23. Produce and update digital maps within established guidelines and time frames using National Incident Management System (NIMS) symbols: ● Incident Action Plan (IAP) map ● Incident briefing map ● Situation/planning map ● Transportation map ● Fire progression map	E, F, I		
24. Use and update GIS databases.	E, F, I		